

Memorite™ Word Processing System



For years, people have always thought that word processing systems were too expensive. And too much trouble.

But the Vector Memorite Word Processing System is changing a lot of people's minds. It edits, stores and produces error-free text—automatically at 600 words per minute.

All at a suggested retail price lower than you ever thought possible.

Best of all, modular enhancements will be made periodically to update Vector/Memorite Word Processing Systems already in the field. So the system you have today will never become “old fashioned.”

Businesses all across the country are already using the Vector/Memorite Word Processing System for contracts, form letters, daily correspondence, manuals, reports, proposals, memos, mailing, legal documents, directories, copy revisions, catalogs, handbooks, newsletters, sales inquiry answers, and much more.

The kind of companies? Everything from law firms, hospitals, insurance firms, banks, brokerage firms, and advertising agencies to colleges, universities and government agencies.

The only question left is, “Why isn't your business using one?”

Word Processing Features

Entering and Editing Text

- ☐ Type anywhere on screen
- ☐ Automatic carriage return
- ☐ Variable tabs, evenly spaced or arbitrary
- ☐ Tab ruler on screen
- ☐ Cursor "arrow" key for cursor up, down, left, right
- ☐ Cursor to top of screen, top of text, end of screen, end of text, beginning of line
- ☐ Variable speed, variable directional scrolling, automatic or manual
- ☐ Scrolling by pages under operator control, for proofreading
- ☐ Status report of memory usage
- ☐ Count of words and characters in document
- ☐ Character-oriented editing, no need to specify text to be changed, line number or page number
- ☐ Overtyping or insert modes
- ☐ Insert line
- ☐ Automatic realignment and repagination after insertion or deletion
- ☐ Delete character, word, sentence, paragraph to end of line, portion, to beginning of text
- ☐ Backspace with or without automatic realignment
- ☐ Cut and paste
- ☐ Search, with wild card characters if desired
- ☐ Global or partial search and replace

Printing

- ☐ 55 characters per second, unidirectional, typewriter quality

- ☐ Mid-text (changeable) stored format directives
- ☐ Standard values for format variables can be used
- ☐ Reset variables to standard by embedded directive or keyboard command
- ☐ Variable margins
- ☐ Automatic paragraph indentation
- ☐ Automatic outline-style indentation
- ☐ Automatic right-justification, using variable character, not word, spacing
- ☐ Variable type density, vertical spacing, and page length
- ☐ Different size pages may be mixed
- ☐ Automatic bold face, underscore, and centering
- ☐ Sub-scripts and super-scripts
- ☐ Automatic forward or backward paper rolling
- ☐ Print and move columns
- ☐ Automatic page numbering, right, left or center, top or bottom
- ☐ Alternation of layout for both-sides printing
- ☐ Optional manual control of page and line number during printing
- ☐ Automatic headers, footers, right or left justified or centered
- ☐ Append text in mid-page at print time for document too long for memory
- ☐ Line-by-line, page-by-page or continuous printing
- ☐ Temporary stop for print-wheel or ribbon change
- ☐ Form feed from console
- ☐ Printer test from console
- ☐ Status of format variables on screen during printing or anytime desired
- ☐ Type directly to printer

- ☐ Merge sorted mailing list with letter
- ☐ Create, modify, sort by size, zip code, sort by date, sort by name, and print mailing list

Disk Features

- ☐ View status of disk
- ☐ Write-protect disk
- ☐ Copy disk
- ☐ Initialize disk
- ☐ 160 pages typed text per disk
- ☐ To reference document, move cursor to name in directory on screen, never need to type document name
- ☐ 2-second document update on disk
- ☐ No constant automatic update disk to slow system down
- ☐ Recall and save document
- ☐ Append document, fast boilerplate assembly
- ☐ Erase document
- ☐ Protect, unprotect document
- ☐ Copy document to order drive

Mail list features

- ☐ Enter, change delete numbers
- ☐ 7 data items per member
- ☐ 1499 members per list
- ☐ Select by 26 specifiers or range of zip codes
- ☐ Sort by name, company name, or zip
- ☐ Print labels or list
- ☐ Random—location merges into letters for personalized mass mailing

Above specifications are subject to change without notice.

VECTOR
VECTOR GRAPHIC INC.

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VIDEO BOARDS

FLASHWRITER I

The Vector Graphic Flashwriter I Video Board generates a 64 character by 16 line display using a 7 x 9 dot matrix character generator for very high quality display images. In addition to alphanumeric displays, Flashwriter I can generate character-by-character reversed video, reduced intensity and block and line graphics. For block graphics, resolution is 128 horizontal by 48 vertical picture elements.

The board also has a eight-bit parallel port with latched strobe that may also be used as a keyboard port. A special feature of Flashwriter I incorporates circuitry to eliminate all glitching and tearing of the screen during updating of data or scrolling.

The Flashwriter I contains its own screen refresh memory and is designed to operate with 4MHz CPU clock rates. The video output is available as composite video or separate video and sync.

Available factory assembled and tested.

SPECIFICATIONS

| | |
|-------------------|--|
| INTERFACE | S-100 bus compatible |
| SCREEN SIZE | 1024 characters; 16 lines of 64 characters |
| CHARACTER MATRIX | 7 X 9 dots |
| SCREEN ELEMENT | 10 X 15 dots |
| VIDEO OUTPUT | Conforms to RS-170 levels; separate TTL video and sync |
| KEYBOARD PORT | 8-bit input; latched strobe |
| POWER REQUIREMENT | +8 Vdc @ 1.2A (Typ) |

FLASHWRITER II

The Vector Graphic Flashwriter II Video Board is a higher density version of the popular Flashwriter displaying 80 characters by 24 lines. A character cell of 8 x 10 dots provides good character resolution and lower case descenders. In addition to normal video, reverse video is optionally controlled by the high order bit of the character code.

The character font is generated by 2708/2716 EPROMs which can be user programmed for special symbols or graphic characters. Up to 256 characters can be generated.

Characters are written on the screen using memory mapped I/O for extremely rapid updating of the screen. Special circuitry prevents flashes on the screen when the screen memory is updated. The 1920 displayed character positions are serially mapped into a 2048 byte block of memory to conserve address space. A keyboard port with latched data provides an easy interface to Vector Graphic's Mindless Terminal or other parallel keyboard.

A socket is also provided for a 1K or 2K PROM monitor and/or video driver, and a power-on jump circuit allows power-up operation without interfering with system RAM at low addresses.

SPECIFICATIONS

| | |
|------------------|---|
| INTERFACE | S-100 bus compatible |
| DISPLAY FORMAT | 1920 characters; 24 lines of 80 characters |
| CHARACTER MATRIX | 8 X 10 dots |
| VIDEO OUTPUT | RS-170 level composite video; separate TTL video and sync |
| KEYBOARD PORT | 8-bit input; latched strobe |
| POWER REQUIRED | +8 Vdc at 910 mA; +16 Vdc at 54 mA; -16 Vdc @ 31 mA |

HIGH RESOLUTION GRAPHICS

The Vector Graphic High Resolution Graphics Board combines high quality with low cost graphics and is designed to operate in one of two modes, digital output or 16 level gray scale. S-100 bus compatible, it is used in conjunction with a standard Vector Graphic 8K RAM memory board to produce digital graphic displays of 256 X 240 picture elements or gray scale (16 levels) of 128 X 120 picture elements. The video output conforms to RS-170 levels and interfaces to standard raster scan monitors.

The board incorporates unique circuitry which allows the screen to be updated without any of the usual glitches common to other boards. Since the memory is multiplexed between the bus and the graphics board, it is still available for general use when the graphics capability is not being used.

Included is a software alphanumeric character generator program, an x-y plotting program providing a high level language for generating original screen display, a macro-oriented pattern drawing program and several predigitized gray scale images for demonstration of the gray scale mode of operation.

Available factory assembled and tested.

SPECIFICATIONS

| | |
|-------------------|---|
| INTERFACE | S-100 bus compatible |
| VIDEO OUTPUT | Composite video; conforms to RS-170 levels |
| RESOLUTION | Digital 256H X 240V Gray scale 128H X 120V 16 Gray Levels |
| MONITOR REQUIRED | Standard Raster Scan |
| MEMORY | Vector Graphic 8K Static Ram Board (not included) |
| POWER REQUIREMENT | +8 Vdc @ 750 mA (Typ) |

VIDEO DIGITIZER

\$250.

Vector Graphic's fast scan Video Digitizer converts output from a standard TV camera, or other source of composite video, into 8-bit gray scale digital information. Video images can then be stored in computer memory. Data is transferred via software to RAM memory — either the memory of a memory-mapped high resolution video board or main RAM. A complete driver program implementing 16 shades of gray is included which controls the board, displays images on a high resolution video board, stores images on disk and prints images on a matrix printer.

Ideal for printing computer-generated images and for medical, security and other special-purpose applications requiring image storage and analysis.

Construction features include card extractors, soldermask on both sides of board and gold-over-nickel edge connectors.

SPECIFICATIONS

INTERFACE

S-100 bus compatible; uses 2 parallel input ports and 1 parallel output port.

VIDEO SOURCE

Standard TV camera having 1 to 3 volt peak-to-peak amplitude and composite video output or any other source of similar composite video; RS-170 timing not required

MAX HORIZ RESOLUTION

About 700 points/line

VERT RESOLUTION

Depends on camera; 480 lines per image normal

POWER REQUIRED

+8 VDC @ 500 mA (typ);
-16 VDC @ low am-
perage

RESOLUTION WITH DRIVER AND HIGH RES. BOARD

128 horizontal; 128 vertical; 16 shades of gray

MEASUREMENT CONTROL BOARDS

PRECISION ANALOG INTERFACE

The Vector Graphic Precision Analog Interface Board enables S-100 bus computers to input and output analog signals for a variety of measurement and control applications. The board is supplied fully assembled and tested and boasts two high accuracy 12-bit digital-to-analog converters. The PAIB contains two analog outputs with a variety of output voltage ranges for both monopolar and bipolar operation. The PAIB may also operate as a successive approximation analog-to-digital converter with input voltages from any of eight multiplexed analog input channels. A separate eight-bit digital output port is also on the board. All board functions are controlled by simple OUT and IN commands. Tested DAC and ADC software is supplied. In addition, the PAIB has a convenient patch area that allows user-designed circuitry to be included on the board.

SPECIFICATIONS

INTERFACE

S-100 bus compatible
Analog inputs and outputs available at 15-pin card edge connector

OUTPUT CHANNELS

2

INPUT CHANNELS

8

RESOLUTION

1 part in 4096

CONTROL PORTS

1 input port;
5 output ports

POWER REQUIRED

+8 V @ 200 mA
+16 V @ 40 mA
-16 V @ 70 mA

DAC

Analog Devices
AD563J/Bin Converter

DAC SETTING TIME

1.2 nS

ANALOG INTERFACE

The Vector Graphic Analog Interface Board is a multipurpose board designed for low cost interfacing with potentiometers, joysticks or voltage sources. In addition, an eight-bit digital port is provided with latched strobe for use as a keyboard input port, to take the place of front panel sense switches or for any other application requiring digital inputs.

A pair of tone pulse generators can be used to produce sounds for games or for keyboard audio feedback. The board occupies two input and output addresses which may be assigned anywhere from 00 to FF hex.

Analog conversion is accomplished by a single slope integration method. Conversion with the resolution required for cursor motion takes about 480 uS.

SPECIFICATIONS

INTERFACE

S-100 bus compatible

A/D CHANNELS

4

INPUT SIGNAL

0 to +2.5 Vdc

RESOLUTION

16 to 1024 counts
(software determined)

CONVERSION TIME

480 uS (Typ) for 16
count resolution

PARALLEL PORT

8-bit input, 1 latched
strobe input

TONE GENERATOR

Dual tone, 450 Hz
and 800 Hz

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